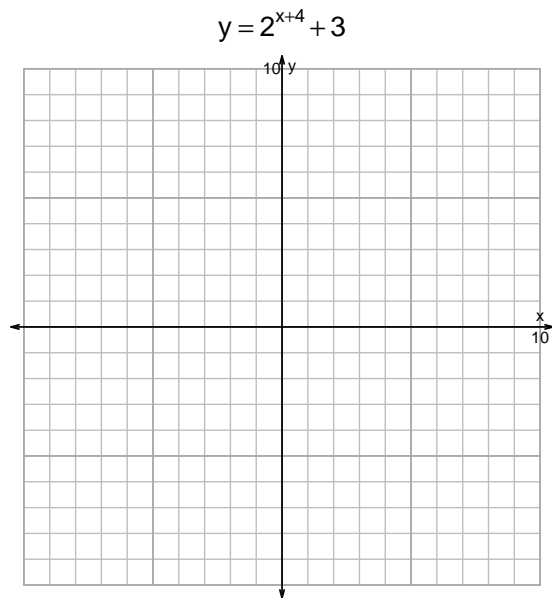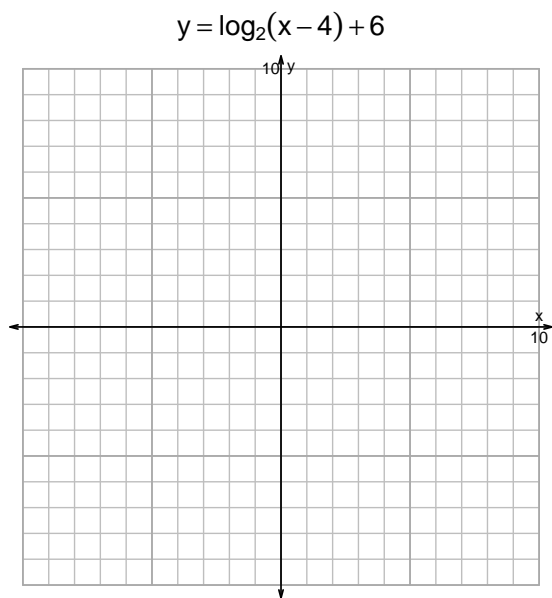Name: _____   Date: _____

s18QUIZ: EXP LOG (QUIZ v240)
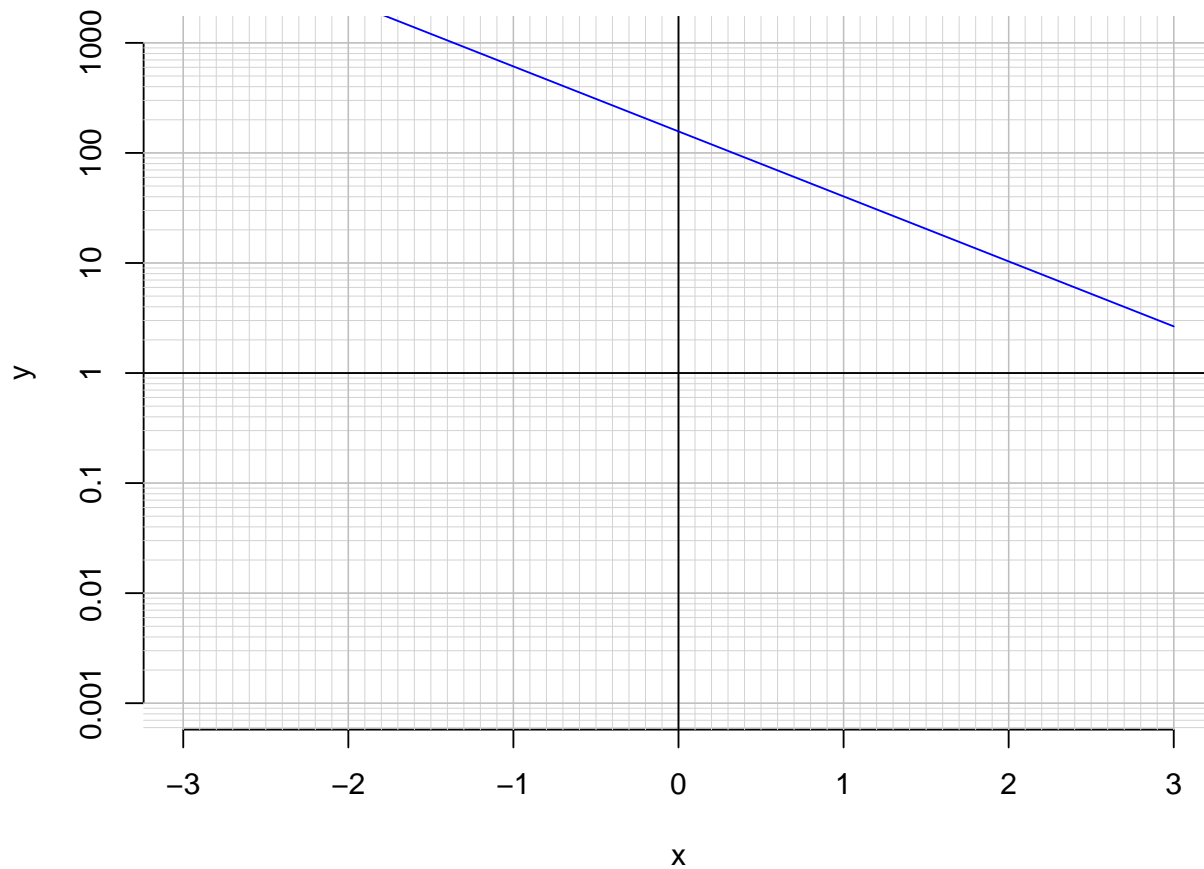
1. Graph $y = \log_2(x - 4) + 6$ and $y = 2^{x+4} + 3$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x - 4) + 6$$

$$y = 2^{x+4} + 3$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-23 = \left(\frac{-4}{3}\right) \cdot 2^{-7t/5}$$

3. An exponential function $f(x) = 157 \cdot e^{-1.36x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(2.4)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(700)$.